



# **Emergency Agricultural Production for Food Security in Madagascar (EAPRO-M)**

AID-OFDA-G-15-00263

Annual Report - REPORTING PERIOD: August 2016 to August 2017



# **Submitted to:**

United States Agency for International Development/Office of Foreign Disaster Assistance (USAID/OFDA)

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#### 1. INTRODUCTION

This report presents a detailed description of the activities carried out during the period August 2016- August 2017. The main sectors of the project are agriculture and food security, and WASH. Within WASH ADRA distributed NFI's under the sector Logistic Support and Relief Commodities, due to these activities were design as part of the WASH strategy, its discussion and reporting will be integrated in the WASH sector. A summary of the main activities undertaken in each of these sectors is described below.

#### 2. PROGRAM PERFORMANCE REPORT

# 2.1 Program Goal:

Improve food security of drought affected households in Bekily, Region of Androy, in the South of Madagascar.

# **2.2 Geographic Area and Beneficiary Profile:**

The EAPROM Phase II project is implemented in 9 communes in the Bekily district of Androy Region.

The EAPROM Phase II targets 7,600 households (first phase targeted 4,000), selected based on the following criteria: female headed households, high numbers of children, elderly dependents and persons with disabilities. All the 7,600 households, making a total of 53,200 individuals (average household size of 7) are involved in the project activities.

Bekily is a district in the South-West of Madagascar that is currently classified IPC 2.

#### 2.2.1 Award Level Beneficiaries

	Total	IDP
<b>Cumulative Period Targeted</b>	66,106	0
Reporting Period Reached	60,482	0
Cumulative Period Reached	73,388	0

#### 2.2.2 Sector Level Beneficiaries

#### a. Agriculture and Food Security

	Total	IDP
<b>Cumulative Period Targeted</b>	66,106	0
Reporting Period Reached	53,200	0
Cumulative Period Reached	66,106	0

b. Water, Sanitation and Hygiene

	Total	IDP
<b>Cumulative Period Targeted</b>	53,200	0
Reporting Period Reached	60,482	0
<b>Cumulative Period Reached</b>	60,482	

# c. Logistics Support and Relief Commodities

	Total	IDP
<b>Cumulative Period Targeted</b>	2800 HHs	0
Reporting Period Reached	2775	0
<b>Cumulative Period Reached</b>	2775	

#### Note:

Across both the Agriculture and WASH sectors, the overall beneficiaries reached in EAPROM Phase II are 60,482people, while 73,388 beneficiaries have been reached through both the EAPROM original agreement and the modification 1, being reported in this period.

# 2.3 - SECTOR 1- Agriculture and Food Security

#### **Main Achievements – Sector Level**

The packaged provided by the program includes activities such as: cooking demonstrations on the preparation and consumption of Sorghum, distribution of seeds (Sorghum, cassava sticks, potatoes vines), vegetable seeds (cabbage, Pe-Tsaï, carrot, cucumber, tomatoes, onion), distribution of agricultural tools (plows, water cans, hoes).

Over the past 12 months, the specialist and field agents trained 480 Lead farmers and 7120 farmers in conservation farming, planting technics, and technics to grow sorghum, as well as land preparation. According to the conditions and context different methods where used such as lead farmer to farmers, farmer to farmer, and finally reinforcement by ADRA's field agent to lead farmers and farmers.

# 2.3.1 Indicator Performance tracking Table: Sector: Agriculture and Food Security - Sub Sector – Improving Agriculture Production/Food Security

Sector 1: Agriculture and Food Security								
Indicators	Reporting Period		Cumulative to Date		Actual vs. EOP targets			
	Targeted	Reached	Targeted	Reached		Actually Achieved	% achieved	

1.	Projected increase in							
	number of months of food self-sufficiency due to distributed seed systems/agricultural input for beneficiary households (MAHFP)	3	5,5	3	5,5	3	5,5	184%
2.	Number of individuals benefiting from seed systems/agricultural input activities, by gender	5000	5000	9751	9751	9751	9751	100%
Females		4090	4090	8002	8002	8002	8002	100%
Males		910	910	1749	1749	1749	1749	100%
3.	Number of Farmers trained through the Field Schools set up?	7600	7600	9751	9751	9751	9751	100%
Females		6217	6217	8002	8002	8002	8002	100%
Males		1383	1383	1749	1749	1749	1749	100%
4.	Percentage of people trained by USAID/OFDA through the Field Schools set up?	100%	100%	100%	100%	100%	100%	100%
Females		82%	82%	82,06%	82,06%	82,06%	82,06%	82,06%
Males		18%	18%	17,94%	17,94%	17,94%	17,94%	17,94%
5.	Estimated amount of post- harvest produce protected against diseases and pest (MT)	4946	4946	4946	3506	4946	3506	71%
Shorgum		3219	1779	3219	1779	3219	1779	55%
Niebé		358	358	358	358	358	358	100%
Cassava		275	275	275	275	275	275	100%
Sweet po	otatoes	1094	1094	1094	1094	1094	1094	100%
6.	Percentage of post-harvest produce protected against diseases and pest	71%	100%	100%	71%	100%	71%	71%
7.	Estimated number of hectares protected against disease and pest	4800	3122	4800	3122	4800	3122	65%
8.	Percentage of hectares protected against disease and pest	100%	65%	100%	65%	100%	65%	65%
9.	Number of people trained in pest control practices disaggregated by sex	7600	7600	9751	9751	9751	9751	100%
Females		6217	6217	8002	8002	8002	8002	100%
Males		1383	1383	1749	1749	1749	1749	100%
10.	Amount of hectares cultivated	50	327,94	6760	4799,64	6760	4799,64	71%
Sorghum	<u> </u>	5288	3134,02	5288	3134,02	5288	3134,02	59,26%

Niebé		760	760	844	843,7	844	843,7	99,96%
Cassava		152	275	309	408,29	309	408,29	132,13%
Sweet po	tatoes	152	252	221	320,98	221	320,98	145,24%
Tomatoes		12	12	12	12	12	12	100%
Cucumbe	er	12	12	12	12	12	12	100%
Carrot		12	15,72	12	15,72	12	15,72	131%
Onion		12	18,02	12	18,02	12	18,02	150%
Cabbage		25	14,90	25	14,90	25	14,90	60%
Pe-Tsaï		25	20,01	25	20,01	25	20,01	80%
11.	Number of Radio Messages (Seed distribution)	75	75	75	75	75	75	100%
12.	Number of Radio Messages(harvest)	75	75	75	75	75	75	100%
13.	Number of Cooking Demo	81	81	225	225	225	225	100%
14.	People trained during the 1st round of cooking demo for sorghum	4320	4320	4320	4320	4320	4320	100%
15.	People trained during the 2nd round of cooking demo for sorghum	5260	5260	5260	5260	5260	5260	100%
16.	People trained during the 3rd round of cooking demo for sorghum	5000	5000	5000	5000	5000	5000	100%
17.	Number of group visited and trained	480	0	480	480	480	480	100%
18.	Number of group installed	0	0	480	480	480	480	100%
19.	Number of group visited regarding the preparation for the harvest	480	480	480	480	480	480	100%
20.	Number of group visited regarding the harvest	480	480	480	480	480	480	100%
21.	Number of group visited to evaluate the production	480	480	480	480	480	480	100%
For Sorg	hum	192	192	480	480	480	480	100%
For Cass	cava	480	480	480	480	480	480	100%
For Cow	peas	480	480	480	480	480	480	100%
For Swee	et Potatoes	480	480	480	480	480	480	100%
22.	Number of farmers that received Tools(bêches,	480	480	480	480	480	480	100%

	rateaux, sarcleuses, house, arrosoirs)							
23.	Number of farmers that received Tools(charue, pompe à pédale, kit d'irrigation, reservoir en bâche)	480	190	480	190	480	190	39,58%
24.	Number of farmer visited			7600	7600	7600	7600	100%
25.	Number of farmer growing niébé visited	7600	7600	7600	7600	7600	7600	100%
26.	Number of farmer visited for sweet potatoes	7600	7600	7600	7600	7600	7600	100%
27.	Number of farmer growing tomatoes visited	2400	2400	2400	2400	2400	2400	100%
28.	Number of farmers growing cuncumber visited	2400	2400	2400	2400	2400	2400	100%
29.	Number of farmers growing carrot visited	2400	2400	2400	2400	2400	2400	100%
30.	Number of farmers growing onion visited	2400	2400	2400	2400	2400	2400	100%
31.	Number of farmers growing cabagge visited	5000	5000	5000	5000	5000	5000	100%
32.	Number of farmers growing Pe-Tsaï visited	5000	5000	5000	5000	5000	5000	100%

#### 2.3.1 Cooking Demonstration on preparation of sorghum

#### - Seed Distribution: sorghum, cassava sticks, sweet potatoe vines

Seeds of food crops were distributed to project beneficiaries to be planted in the off-season. A reinforcement was done, to secure the results obtained with an additional distribution of seeds to farmers. This additional kit was composed of: 2 kg of sorghum and 15 kg of potato vines, and was distributed to the priority 5000 households and 15 kg of cassava stem to all the 7600 beneficiaries. The distributions at the levels of the 9 communes, the monitoring of activities shows that the promoted techniques are being implemented and that farmers expect an additional harvest with increased yealds.

In the case of sorghum, a part of seed was retained by the beneficiaries for planting in the early semi-pre-season period, during the first rains, towards the end of September, and a few sticks of cassava and potato vines were used for seed multiplication.

#### Seeds for vegetable gardens

From January to July 2017, the project distributed vegetable crops to a total of 5,000 women headed-households mainly versus 2400 planned. The main crops promoted were: carrots, onions, cucumber, tomatoes. Cabbage seeds were added to the basket after feedback received from the beneficiaries.

The harvest results show that the beneficiaries have the possibility to offer a more balanced and adequate diet to their families.

#### 2.3.2 Tools distribution

In addition to the tools already distributed in the second quarter of the project, spades, hoes, rakes and watering cans were distributed for the 480 groups of beneficiary farmers. The project aim is to strengthen production capacity and increase the labor force by supporting the farmers through the granting of more agricultural tools. The organization in informal groups, also introduces farmers to a form of collaborative effort. In the communities targeted, the number of tools distributed was reported by beneficiaries as sufficient to cover the gap existing. The 480 groups of beneficiary farmers received 15 spades, 10 rakes, 15 watering cans, 5 weeders, 7 hoes and one (1) plow per group.

The table below shows more explicitly the details of the tools distributed over the project life:

	Période	Spades	Rakes	Water can	Weeders	Hoes	Plow
1	QTR2/QTR3	1440	1440	2400	2400		
2	QTR4	3360	3360	4800		3360	
3	QTR4	2400					480
	TOTAL	7200	4800	7200	2400	3360	480

In addition to these tools, 60 pedal pumps with 200 irrigation kits, including 100 micro-tube and 100 valve sheaths, and 200 water tanks are distributed to support beneficiaries in crop irrigation. The farmer groups that maintain vegetable gardens near a water source are the main target for this support.

#### 2.3.3 Harvest

The last harvests taking place in this reporting period was sweet potato and cassava which continue until September especially for cassava. In terms of harvesting, households apply the new learned techniques during the harvest, and have gained improved knowledge on storing cassava roots and potato tubers in order to increase the life of the stoks. In terms of crop yields, crops are fairly good for both food crops and vegetable crops, the table below shows the results of a random sampling in 20 households targeted by the project.

	Sorghum	Cassava	Cowpea	Sweet potatoes
Achievement	183 Kg/Ha	10547 Kg/Ha	750 Kg/Ha	11848 Kg/Ha

<sup>\*\*\*</sup> Returns obtained by sampling method of 20 households by municipalities

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#### 2.4 SECTOR: WASH

# 2.4.1 Sector level Main Achievement

Over the last quarter, 9 additional were rehabilitated increasing the number to 15 wells rehabilitated; besides that more than 1500hand washing devices (tippy taps) were installed throughout the 102 fokontany in the 9 communes targeted by the project.

Sector 1: WASH	Donortino D	ani a d	Committee	4 . D 4 .	A strantan l	EOD 4 mm a sta	
Indicators	Reporting P	eriod	Cumulativ	e to Date		EOP targets	
	Targeted	Reached	Targeted	Reached	Overall target	Actually Achieved	% achieved
Sub-sector 1: Increase acces	ss to safe wa	ter for cor	sumption	l			
Hygiene Promotion							
Number of people receiving direct hygiene promotion (excluding mass media campaigns and without double-counting), disaggregated by gender Sanitation toilets	53200	60482	53200	60482	53200	60482	114%
Female	26600	34939	26600	34939	26600	34939	131%
Male	26600	25543	26600	25543	26600	25543	96%
Hand Washing Knowledge, HP1							
Number of people receiving hygiene promotion, disaggregated by gender	53200	60482	53200	60482	53200	60482	114%
Female	26600	34939	26600	34939	26600	34939	131%
Male	26600	25543	26600	25543	26600	25543	96%
Number of people interviewed during household visits, disaggregated by gender.	381	718	381	718	381	718	188%
Females	191	589	191	589	191	589	308%
Males	190	129	190	129	190	129	67,90%
	304	659	304	659	304	659	217%

Number of respondents who know 3 of 5 critical times to wash hands, disaggregated by gender							
Females	153	539	153	539	153	539	352%
Males	151	120	151	120	151	120	79,4%
Hand Washing Capacity, HP2							
Number of people receiving hygiene promotion, disaggregated by gender	53200	60482	53200	60482	53200	60482	114%
Females	26600	34939	26600	34939	26600	34939	131%
Males	26600	25543	26600	25543	26600	25543	96%
Number of households visited	363	587	363	587	363	587	162%
Number of households with soap/ <b>ash</b> and water at a hand washing location.	1020	1020	1310	1429	1310	1429	109%
Safe Water Handling, HP3							
Number of people receiving hygiene promotion, disaggregated by gender	53200	60482	53200	60482	53200	60482	114%
Females	26600	34939	26600	34939	26600	34939	131%
Males	26600	25543	26600	25543	26600	25543	96%
Number of households visited	363	587	363	587	363	587	162%
Number of households who store their drinking water safely in clean containers	290	328	290	328	290	328	113%
Water Point Management, HP7							
Number of village water user committees created	10	15	15	15	15	15	150%
Number of village water user committees trained	10	15	15	15	15	15	150%

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Number of men and women trained to be on water user committees	250	239	375	239	375	239	95%
Females	125	86	190	86	190	86	69%
Males	125	153	185	153	185	153	122%
Number of village water user committees active at least 3 months after training.	10	6	15	6	15	6	60%
Water Supply Infrastructure							
Water Usage, WS1							
Number of people directly benefitting from the water supply infrastructure program, disaggregated by gender	7200	4018	12000	7160	12000	7160	59,66%
Females	3600	2188	6000	3838	6000	3838	63,96%
Males	3600	1830	6000	3232	6000	3232	53,86%
Number of people on water use committees trained in safe water use, water point rehabilitation, repair and maintenance, disaggregated by gender	27	27	45	45	45	45	100%
Females	0	0	0	0	0	0	0%
Males	27	27	45	45	45	45	100%
Number of people targeted by water supply infrastructure	10800	4018	18000	7160	18000	7160	39,77%
Females	5400	2188	9000	3838	9000	3838	42,64%
Males	5400	1830	9000	3232	9000	3232	35,91%
Number of households visited.	363	363	363	363	363	363	100%
Average liters/person/day collected from all sources for drinking, cooking and hygiene.	15	34	15	34	15	34	266,66%
Water Production, WS2							

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Estimate of the population served by water supply program.	7200	4018	12000	7160	12000	7160	59,66%
Females	3600	2188	6000	3838	6000	3838	63,96%
Males	3600	1830	6000	3232	6000	3232	53,86%
Estimate of liters produced per day by all safe water supplies.	108000	168000	180000	244000	180000	244000	135,55%
Estimated water supplied per beneficiary in liters per person per day.	15	34	15	34	15	34	266,66%
Source Water Quality (Bacteriological), WS3							
Number of water points developed, repaired, or rehabilitated.	10	15	15	15	15	15	150%
Number fecal coliform bacteriological tests conducted.	15	15	45	35	45	35	77,77%
Number of test results with O fecal coliforms per 100 ml	15	15	45	19	45	19	42,22%
LOGISTICS SUPPORT AND I	RELIEF CO	MMODITI	ES				ı
Ensure access to essential NFIs for s	safe water acce	ss and esser	ntial hygiene	actions			
Non-food Items (NFIs)							
Total number and per item USD cost of NFIs distributed, by type	0	0	2800	2775	2800	2775	99%
Total number of people receiving NFI	0	0	2800	2775	2800	2775	99%
Females	0	0	1400	2455	1400	2455	175%
Males	0	0	1400	320	1400	320	23%
USD Cost of Water containers	0	0	\$92,988	\$73,015	\$92,988	\$73,015	78.5%
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#### **Indicator Discussion:**

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# - Hand Washing Knowledge, HP1

A total of 60,482 individuals (34,939 F/25,543 M) have received hygiene promotion, not including mass media which was also broadcast by radio. The target was exceeded by 14%. This messaging includes key messages in hand washing at 5 critical times, hand washing with soap or ash, use of tippy taps and safe storage. While generally targets have been overachieved with females the number of males has been fewer than targeted. The team is currently working on solutions to increase the coverage of promotion activities targeted at male beneficiaries. High levels of household adoption are partially attributed to the highly effective school campaigns and the influence of the school children on WASH practices in the home.

# - Hand Washing Capacity, HP2

Hand washing capacity has exceeded the target by 9% with the widespread adoption of tippy taps at the household level (1,020). The partial assistance with basic supplies and the practical demonstrations at the community and school level have led to a high degree of adoption and appropriate use. This practice has also been bolstered through the influence of school children who show a great deal of interest and high levels of correct practice, who then encourage adoption in the home.

#### - Water Point Management, HP7

All of the committees that were created more than three months ago (6) are still active. While the stated ideal number of committee participants in 25 and this is reflected in the target the average number of participating members is about 16. The evidence from the 6 committees that have been functioning for more than three months is that the ideal number of participants varies by community taking account the size. While the overall number of members trained is lower than targeted the effectiveness of the committee size will continue to be monitored.

#### - Water Usage, WS1

Initially 10 water points were targeted in the approved proposal. This target was increased to 15 based on need and cost savings. The number of individuals making use of the water points varies greatly between communities. Some communities have fewer than the Sphere standard of 500 users per hand pumped borehole, while other have many more. The initial target took into account the reports of up to 1,200 individuals being served by functioning boreholes, however on the average the 15 rehabilitated water points are serving slightly less than 500. This speaks to the challenges of widely dispersed communities and the impracticality of accessing safe water sources at great distances.

#### - Water Production, WS2

The 15 water points rehabilitated show good yield averaging 2.21 m3/ hr. The total liters produced per day exceeds the target.

#### - Source Water Quality (Bacteriological) WS 3

Water points are analyzed a total of three times: before rehabilitation, immediately after rehabilitation, and after six months. The achievement of 19 of 45 test with 0 CFU/ 100 ml is reflective of the fact that 9 of the 15 rehabilitations have only occurred in the last quarter. 35 tests were conducted in total:

- 15/15 initial tests showing greater than 0 CFU/ 100 ml sample
- 15/15 post rehab showing 0 CFU/ 100 ml sample
- 5/15 follow up tests conducted 4 showing 0 CFU/ 100 ml sample
- 10 follow up tests yet to be conducted.

#### 3. COORDINATION

Over the 12 months of the project, ADRA intensified and strengthened its collaboration with the National Office of Nutrition, UNICEF, WFP, the Ministry of Agriculture and the one in charge of Water. The improvement of the cooperation helped create synergies and map the geographical areas of intervention. ADRA is an active member of the regional and national relevant clusters.

#### 4. CHALLENGES & LESSONS LEARNED

ADRA Madagascar and ADRA International meet in Tulear, between the 17 and 22 September of 2017, for the planning of the modification 2 of this agreement. One of the exercises was to discuss the Challenges and Lessons Learned of the current project as the basis for the planning of the new round. This will be shared with OFDA on the ongoing updates, and may be compiled into a formal report, if requested.

#### 5. HUMANITARIAN SITUATION

According to the results of the IPC Acute Food Insecurity Analysis conducted in June 2017, with the support of the IPC Global Support Unit, the IPC Southern Africa Regional Support Unit and FEWSNET Southern Africa, between March 2017 and May 2017 (peak of the hunger-gap season), the number of people in IPC 3 and 4 phases decreased significantly, from 845,000 to 583,000 from October 2016 to April/June 2017. The districts of Betioky, Ampanihy, Beloha, Tsihombe, Amboasary, and the four communes of Taolagnaro in the *Grand Sud* are in IPC phase 3 (crisis).

Other districts, including Bekily, Ambovombe, are in IPC Phase 2 (stressed). As per IPC projections, for the period from June to September 2017, the situation in Ampanihy should improve to IPC phase 2 and an estimated 409,000 people will be in IPC phases 3 and 4 in all of the districts, representing 25% of area's total population of this area. No district will be classified in IPC phase 4.

The most vulnerable continue to be in a state of acute emergency that will only be broken if external support is provided.